

Table 1 Parameters of Concern and Their Effects on Agricultural Water Quality

Parameters	Effect	Source	Affected Factors	Geographic Area of Concern
Salinity (TDS & EC)	high	seawater, agricultural drainage	crop yield, soil structure, management.	All irrigated areas in Western & Interior Delta.
Sodium (EC)	med	seawater, agricultural drainage	crop yields, sensitive crops (tree crops, beans, etc.), management.	All irrigated areas in Western & Interior Delta.
Chloride	med	seawater, agricultural drainage	crop yield, plant necrosis, management.	Fresh market produce irrigated areas.
Boron	med	groundwater	crop yield, drying and chlorosis, management.	
Alkalinity (Calcium Carbonate)	med		greenhouses, CaCO_3 precipitation, soil infiltration, management.	
Turbidity		delta & tributary watersheds during flood events	sedimentation of open channels, clogging of sprinkle & trickle systems,	

			soil crusting.	
Nutrients		wastewater discharge	algae in drains, clogging, NO ₃ - beets, grapes, etc..	
Temperature			rice crop yield (cold water effects on germination)	Irrigated rice acreage in the North and Central Delta.
BOD/COD		seawater, agricultural drainage	crop yield, wildlife (aquatic).	
Metals		seawater, agricultural drainage	crop concentrations	

SOURCE: Initial report of the Water Quality Technical Advisory Committee, Bay-Delta Oversight Council, Draft, December 1994